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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,531	12/19/2001	Leonardo Estevez	TI-31793	6204

23494 7590 05/27/2005

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EXAMINER
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ALAVI, AMIR

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/025,531

**Applicant(s)**

ESTEVEZ ET AL.

**Examiner**

Amir Alavi

**Art Unit**

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Election/Restrictions

- Applicant's election of Group I in the reply filed on 28 March 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
- Claims 4-5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Election has been considered **without** traverse in the reply filed on 28 March 2005.

## **Specification**

- The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
- Applicant is reminded of the proper content of an abstract of the disclosure.
- The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words.
- A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement.
- The disclosure is objected to because of the following informalities: On page one, lines 5-6, the Serial number and the filing date needs to be provided.
- Appropriate correction is required.

### **Claim Rejections - 35 USC § 102**

- The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by MacCormack et al. (USPN 6,006,276).

Regarding claim 1, MacCormack et al. disclose: (a) comparing blocks of pixels in a strip of blocks in an input image to corresponding blocks of pixels in a corresponding strip of blocks of a prior image (please note, figure 9, in correlation to column 9, lines 59-67 and column 10, lines 57-67. In this regard, as figure 9 indicates, it consists of 6 tiles or blocks, thereby, an MCU being a strip of blocks. As indicated, the comparison of the difference field coefficients to the reference field coefficients may be made on a number of different bases; an entire MCU of data is considered to be different if any one of the six constituent pixel blocks is found to be different from the corresponding pixel block of the reference image); (b) encoding said strip of blocks of

Art Unit: 2621

an input image as said corresponding strip of blocks of a prior image when said comparing of step (a) indicates said strip approximates said corresponding strip (please note, column 8, lines 53-55. As indicated a "zero" value for the bit corresponding to a particular MCU indicates that no data for the MCU is included in the present difference data field. Herein, "no data" indicates, "no change"; in this regard, Examiner considers this "no data" indicative of no changes to correspond to Applicant's "approximation". As such, "indication of zero" is indeed representative of encoding processing).

Regarding claim 2, MacCormack et al. disclose, wherein said comparing of step (a) of claim 1 includes comparing to a threshold the difference between DC coefficients of each of the blocks of said strip and DC coefficients of each of the blocks of said corresponding strip (please note, column 9, lines 59-67 and column 10, lines 57-67. As indicated the DC coefficient for the pixel block of the difference image may be compared to the DC coefficient of the corresponding pixel block of the reference image. If the difference between the DC coefficients is greater than a given threshold, then the pixel block of the difference field would be declared, "different").

Regarding claim 3, MacCormack et al. disclose, wherein said strip of blocks of an input image of step (a) of claim 1 by JPEG encoding when said comparing of step (a) indicates said strip fails to approximate said corresponding strip (please note, column 10, lines 37-67 and column 11, lines 1-7. As indicated if any pixel block in an MCU is found to be "different", then that block and the other constituent blocks of the MCU are JPEG encoded. In this regard, Examiner considers this "different", to correspond to Applicant's, "approximation failure").

### **Other prior art cited**

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wang et al. (USPN 6,359,928 B1) is pertinent as teaching system and method for compressing images using multi-threshold wavelet coding.

Divakaran et al. (USPN 6,449,392 B1) is pertinent as teaching methods of scene change detection and fade detection for indexing of video sequences.

McGee et al. (USPN 6,766,098 B1) is pertinent as teaching method and apparatus for detecting fast motion scenes.

Simpson et al. (USPN 6,724,817 B1) is pertinent as teaching adaptive image data compression.

Mekuria (USPN 6,724,939 B1) is pertinent as teaching low complexity JPEG decoder.

Gillman et al. (USPN 6,434,273 B1) is pertinent as teaching method for reconstructing a bi-level image from a low quality discrete transform image.

MacCormack et al. (USPN 5,828,848) is pertinent as teaching method and apparatus for compression and decompression of video data streams.

## Contact Information

- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amir Alavi whose telephone number is 571-272-7386.
- The examiner can normally be reached on Mon-Thu.. 8:00 am thru 6:30pm.If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Bhavesh Mehta can be reached on 571-272-7453.
- The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.
- For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'J. S.', is located in the bottom right corner of the page.